List of Current Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 10 (Cancelled)

11. (Previously presented) A magneto-inductive flow sensor for a fluid flowing in a pipeline, comprising:

a measuring tube for conveying the fluid;

a magnetic circuit arrangement arranged at said measuring tube for producing and guiding a magnetic field, which induces an electric field in the flowing fluid; and

measuring electrodes for tapping a voltage from the electric field, wherein:

said measuring tube includes a carrier tube and a liner, especially a tubular liner, of insulating material accommodated in a lumen of said carrier tube;

at least one groove formed in a wall of said carrier tube, which is open toward the lumen of said carrier tube,

said measuring tube includes, an open-pored support skeleton embedded in said liner for stabilizing said liner;

said at least one groove, is at least partially so filled by a material, especially a sintered material, of said support skeleton, directly sintered in said carrier tube, that said support skeleton is connected by shape interlocking with said carrier tube; and

the strength loss temperature of said carrier tube is greater than the strength loss temperature of said support skeleton.

12. (Cancelled)

13. (Previously presented) The magneto-inductive flow sensor as claimed in claim 12, wherein:

said at least one groove has a backcut, which is so filled by material of said support skeleton that a radially effective shape interlocking is formed between said support skeleton and said carrier tube.

14. (Previously presented) The magneto-inductive flow sensor as claimed in claim 12, wherein:

a ridge is formed on said support skeleton corresponding to said one groove, and said ridge is comprised, at least in part, of the material of said support skeleton and extends into said one groove.

15. (Previously presented) The magneto-inductive flow sensor as claimed in claim 11, wherein:

said carrier tube further has an additional groove, spaced from said one groove, formed in a wall of said carrier tube and open towards the lumen of said carrier tube.

16. (Previously presented) The magneto-inductive flow sensor as claimed in claim 11, wherein:

said at least one groove, is at least partially so filled by insulating material of said liner, that said liner is connected with said carrier tube by shape-interlocking.

17. (Previously presented) The magneto-inductive flow sensor as claimed in claim 11, wherein:

said at least one groove includes a backcut, which is so filled by insulating material of said liner, that a shape-interlocking effective at least radially inwardly is formed between said liner and said carrier tube.

18. (Previously presented) The magneto-inductive flow sensor as claimed in claim 11, wherein:

said first groove is embodied as an annular groove extending essentially coaxially with the wall of said carrier tube.

19. (Previously presented) The magneto-inductive flow sensor as claimed in claim 11, wherein:

said first groove has an essentially trapezoidally shaped cross section.

20. (Previously presented) A method for manufacturing a measuring tube for a flow sensor comprising a measuring tube which includes a carrier tube and a liner, a magnetic circuit arrangement, and measuring electrodes, which method comprises the steps of:

forming at least one groove in a wall of said carrier tube which is open toward the lumen of said carrier tube;

producing a support skeleton in the lumen of the carrier tube;

introducing the liner into the lumen of the carrier tube, wherein:

for producing the support skeleton, loose sinter starting material is so charged into the lumen of the carrier tube, that it at least partially fills the at least one groove, and the charged sinter starting material is sintered within the carrier tube; and

for introducing the liner into the lumen, insulating material is allowed to penetrate at least partially into the produced support skeleton and is allowed to solidify in the lumen of the carrier tube, after the sinter starting material has been sintered within the carrier tube; and

the strength loss temperature of the carrier tube is provided to be greater than the strength loss temperature of the support skeleton.